

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims.

1-26. (canceled)

¹ 27. (currently amended) A method for ~~the treatment of a patient having need of HMF administering to the patient a therapeutically~~ stimulating the proliferation and differentiation of hematopoietic progenitor cells, comprising contacting bone marrow cells with an effective amount of a polypeptide selected from the group consisting of:

- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO:2;
- (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO:2;
- (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
- (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514

² 28. (previously presented) The method of claim ¹ 27, wherein the polypeptide is (a).

³ 29. (currently amended) The method of claim ² 28, wherein the polypeptide is administered to a patient suffering from ~~treat~~ leukemia.

⁴ 30. (currently amended) The method of claim ² 28, wherein the polypeptide is administered to a patient suffering from a ~~treat~~ blood-related disorder[[s]].

31-35 (canceled)

⁵ 36. (previously presented) The method of claim ¹ 27, wherein the polypeptide is (b).

⁶ 37. (currently amended) The method of claim ⁵ 36, wherein the polypeptide is administered to ~~treat~~ a patient suffering from leukemia.

~~38.~~ (currently amended) The method of claim ~~36~~⁵, wherein the polypeptide is administered to ~~treat~~ a patient suffering from a blood-related disorder[[s]].

39-43 (canceled)

~~44.~~⁸ (previously presented) The method of claim ~~27~~¹, wherein the polypeptide is (c).

~~45.~~⁹ (currently amended) The method of claim ~~44~~⁸, wherein the polypeptide is administered to ~~treat~~ a patient suffering from leukemia.

~~46.~~¹⁰ (currently amended) The method of claim ~~44~~⁸, wherein the polypeptide is administered to ~~treat~~ a patient suffering from a blood-related disorder[[s]].

47-51 (canceled)

~~52.~~¹¹ (previously presented) The method of claim ~~27~~¹, wherein the polypeptide is (d).

~~53.~~¹² (currently amended) The method of claim ~~52~~¹¹, wherein the polypeptide is administered to ~~treat~~ a patient suffering from leukemia.

~~54.~~¹³ (currently amended) The method of claim ~~52~~¹¹, wherein the polypeptide is administered to ~~treat~~ a patient suffering from a blood-related disorder[[s]].

55-59 (canceled)

~~60.~~ (new) A method for promoting the removal of malignant cells, comprising contacting immature malignant leukemia cells with an effective amount of a polypeptide selected from the group consisting of:

- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO:2;
- (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO:2;
- (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
- (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514;

wherein the amount of polypeptide is effective to stimulate differentiation of immature malignant leukemia cells.

61. (new) The method of claim 60, wherein the polypeptide is (a).
62. (new) The method of claim 61, wherein the polypeptide is administered to a patient suffering from leukemia.
63. (new) The method of claim 60, wherein the polypeptide is (b).
64. (new) The method of claim 63, wherein the polypeptide is administered to a patient suffering from leukemia.
65. (new) The method of claim 60, wherein the polypeptide is (c).
66. (new) The method of claim 65, wherein the polypeptide is administered to a patient suffering from leukemia.
67. (new) The method of claim 60, wherein the polypeptide is (d).
68. (new) The method of claim 67, wherein the polypeptide is administered to a patient suffering from leukemia.
69. (new) A method for stimulating the proliferation of stromal cells, comprising contacting stromal cells with an effective amount of a polypeptide selected from the group consisting of:
- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO:2;
 - (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO:2;
 - (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
 - (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514.
- 14 76. (new) The method of claim 69, wherein the polypeptide is (a).
- 15 77. (new) The method of claim 69, wherein the polypeptide is (b).

- ¹⁶
~~72~~. (new) The method of claim ¹³~~69~~, wherein the polypeptide is (c).
- ¹⁷
~~73~~. (new) The method of claim ¹³~~69~~, wherein the polypeptide is (d).
- ¹⁸
~~74~~. (new) A method for stimulating the proliferation and differentiation of CD4+ or CD8+ T-cells, comprising contacting T-cells with an effective amount of a polypeptide selected from the group consisting of:
- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO:2;
 - (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO:2;
 - (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
 - (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514.
- ¹⁹
~~75~~. (new) The method of claim ¹⁸~~74~~, wherein the polypeptide is (a).
- ²⁰
~~76~~. (new) The method of claim ¹⁹~~75~~, wherein the polypeptide is administered to a patient suffering from leukemia.
- ²¹
~~77~~. (new) The method of claim ¹⁹~~75~~, wherein the polypeptide is administered to a patient infected with HIV.
- ²²
~~78~~. (new) The method of claim ¹⁸~~74~~, wherein the polypeptide is (b).
- ²³
~~79~~. (new) The method of claim ²²~~78~~, wherein the polypeptide is administered to a patient suffering from leukemia.
- ²⁴
~~80~~. (new) The method of claim ²⁰~~76~~, wherein the polypeptide is administered to a patient infected with HIV.
- ²⁵
~~81~~. (new) The method of claim ¹⁸~~74~~, wherein the polypeptide is (c).
- ²⁶
~~82~~. (new) The method of claim ²⁵~~81~~, wherein the polypeptide is administered to a patient suffering from leukemia.

²⁷
~~83.~~ (new) The method of claim ²⁵~~81~~, wherein the polypeptide is administered to a patient infected with HIV.

²⁸
~~84.~~ (new) The method of claim ¹⁸~~74~~, wherein the polypeptide is (d).

²⁹
~~85.~~ (new) The method of claim ²⁸~~84~~, wherein the polypeptide is administered to a patient suffering from leukemia.

³⁰
~~86.~~ (new) The method of claim ²⁸~~84~~, wherein the polypeptide is administered to a patient infected with HIV.

87. (new) A method for stimulating the proliferation of thymocytes, comprising contacting thymocytes cells with an effective amount of a polypeptide selected from the group consisting of:

- sub 87*
- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO:2;
 - (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO:2;
 - (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
 - (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514.

³²
~~88.~~ (new) The method of claim ³¹~~87~~, wherein the polypeptide is (a).

³³
~~89.~~ (new) The method of claim ³¹~~87~~, wherein the polypeptide is (b).

³⁴
~~90.~~ (new) The method of claim ³¹~~87~~, wherein the polypeptide is (c).

³⁵
~~91.~~ (new) The method of claim ³¹~~87~~, wherein the polypeptide is (d).

³⁶
~~92.~~ (new) The method of claim ³¹~~87~~, wherein said bone marrow cells are contacted with said polypeptide *in vitro*.

³⁷
~~93.~~ (new) The method of claim ³¹~~60~~, wherein said leukemia cells are contacted with said polypeptide *in vitro*.

³⁷
~~94~~. (new) The method of claim ¹³~~69~~, wherein said stromal cells are contacted with said polypeptide *in vitro*.

³⁸
~~95~~. (new) The method of claim ¹⁸~~74~~, wherein said T-cells are contacted with said polypeptide *in vitro*.

³⁹
~~96~~. (new) The method of claim ³¹~~87~~, wherein said thymocytes are contacted with said polypeptide *in vitro*.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Mark Hyman on 24 February 2004.

The application has been amended as follows:

Please cancel claims 60-68⁴⁹³ without prejudice to Applicant's right to pursue the subject matter claimed therein in a continuing application.

Please amend claim 69 as follows:

~~69~~¹³. (Amended) A method for stimulating the proliferation of bone marrow stromal cells, comprising contacting said cells with an effective amount of a polypeptide selected from the group consisting of:

- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO: 2;
- (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO: 2;
- (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
- (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514.

Please replace claim 87 with:

31/ 87. (Amended) A method for stimulating the proliferation of thymocytes, comprising contacting said thymocytes with an effective amount of a polypeptide selected from the group consisting of:

- (a) a polypeptide comprising residues 1 to 142 of SEQ ID NO: 2;
- (b) a polypeptide comprising residues 2 to 142 of SEQ ID NO: 2;
- (c) a polypeptide comprising the amino acid sequence of the polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514; and
- (d) a polypeptide comprising the amino acid sequence of the mature polypeptide encoded by the human cDNA contained in ATCC® Deposit No. 75514.

The following is an examiner's statement of reasons for allowance: Applicant agreed to the examiner's amendment to facilitate allowance of the majority of the claims. Applicant did not concede to any rejection in accepting this amendment. Applicant reserves their right to prosecute the invention defined by claims 60-68 in a continuing application..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth C. Kemmerer, Ph.D. whose telephone number is (571) 272-0874. The examiner can normally be reached on Monday through Thursday, 7:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne L. Eyler, Ph.D. can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ECK